


ALCOHOL
— AND —
PROHIBITION
FROM THE
STANDPOINT
OF MODERN
SCIENTIFIC
MEDICINE

— By —

ARTHUR DEAN BEVAN, M. D.
Professor of Surgery Rush Medical College
Surgeon Presbyterian Hospital. ∴ Former
President American Medical Ass'n



THE ANTI-SALOON LEAGUE OF AMERICA
WESTERVILLE, OHIO



Digitized by the Internet Archive
in 2017 with funding from
Columbia University Libraries

ALCOHOL AND PROHIBITION FROM THE STANDPOINT OF MODERN SCIENTIFIC MEDICINE

By ARTHUR DEAN BEVAN, M.D.

PROFESSOR OF SURGERY, RUSH MEDICAL COLLEGE;
SURGEON THE PRESBYTERIAN HOSPITAL; FORMER
PRESIDENT OF THE CHICAGO MEDICAL SOCIETY;
FORMER PRESIDENT OF THE AMERICAN MEDICAL
ASSOCIATION, ETC.*

ALCOHOL FROM THE STANDPOINT OF MODERN SCIENTIFIC MEDICINE

FOR many centuries man has consumed various kinds of alcoholic drinks. The amount of alcohol in these drinks has varied greatly. They can, however, be divided into three general groups: Beer, containing from 2 to 4 per cent of alcohol; Wine, containing from 10 to 20 per cent; and strong liquors, like whisky, rum and gin, containing from 40 to 50 per cent.

Viewed from the standpoint of modern scientific medicine alcohol belongs to the group of narcotics which consist of alcohol, ether, chloroform, chloral and similar drugs, such as sulphonal and veronal. The general actions of all the members of this narcotic group are very much the same. They produce a first stage of imperfect consciousness and confused ideas, followed later by a stage of excitement, and if the dose is large complete unconsciousness which may, if the dose is sufficiently large, terminate in death. A fatal dose varies from a pint to a quart of alcohol consumed within a few hours.

*Address delivered before State Convention of Illinois Anti-Saloon League, Dec. 20, 1928.

DIRECT INJURIOUS ACTION ON THE BRAIN

There has been some dispute as to whether these drugs are stimulants or are paralyzing agents. Scientific men who have studied this problem for the most part regard them as not being stimulants at all, or if they have a stimulating action, the stimulating action is very temporary as the main action is that of depressing agents. All of these narcotics have a special affinity for fatty tissues and the nervous system and are carried, after being absorbed in the body, by the blood to the brain where the nerve cells are rich in fatty substances, called lipoids. Alcohol produces a direct injurious effect upon the brain.

EFFECT ON NERVOUS SYSTEM

The action of alcohol on the nervous system differs a good deal in different individuals. In small amounts it produces a feeling of greater confidence in the mental and physical powers of the individual who may become boisterous and loquacious; self control is lost and the will-power is weakened. The individual may seem to be unusually clever for a time and then the speech becomes difficult, the gait unsteady, and this may be followed by nausea and vomiting. Large doses of alcohol may produce very deep sleep which may pass into such complete unconsciousness as to resemble the condition of ether or chloroform anesthesia, and this condition may last for hours, and eventually result in death.

Carefully planned experiments show that regiments of troops can march further and are in better condition after severe exercise without alcohol than those

that are supplied with alcohol. In doing intellectual work it has been found that the receptive and intellectual powers are weakened by very small quantities of alcohol. This has been tested out with people setting up type and with people adding up columns of figures, and in a variety of ways.

EFFECT ON DIGESTION

The effects of alcohol on digestion have been extensively studied. Its continued use in considerable quantities produces chronic irritation of the stomach, a gastric catarrh, with resulting nausea and vomiting. It has often been claimed that alcohol is of value as a food. It is true that a small amount of alcohol can be burned up in the body just as starches, fats and sugars can be burned up. The amount that can be safely used as a food, however, is very limited, as even in comparatively small amounts alcohol has a definite deleterious effect upon the nervous system. Continued use of alcohol produces fatty degeneration of the heart and other tissues. It produces arteriosclerosis of the blood vessels and cirrhosis of the liver. For many years alcohol was prescribed in cases where individuals were suffering from different forms of infection. Modern scientific medicine has shown that alcohol does not assist the body in resisting infections but that it makes the individual much more susceptible to infections. This is particularly true in pneumonia, where careful observation has shown that the individual who drinks even moderately becomes much more easily the victim of pneumonia than the man who does not drink at all.

AS A THERAPEUTIC AGENT

Alcohol has little place in modern scientific medicine as a therapeutic agent. At the Presbyterian Hospital in Chicago, where we take care of more than twelve thousand patients a year, we have not yet prescribed through the drug room of the hospital a single bottle of alcoholic liquor since the passage of the prohibition amendment, and this is not due to any regulation against the use of alcohol. Any one of the attending medical men has the privilege of using alcohol if he sees fit in the handling of his cases. It is due to the fact that there is little or no logical or scientific reason for the internal administration of alcohol in the modern treatment of disease. On the other hand, the external use of alcohol has increased very markedly. We use hundreds of gallons of denatured alcohol which costs, without the internal revenue tax, from 40 to 53 cents a gallon, in alcohol rubs for patients, in making tincture of green soap which is very extensively employed in cleansing wounds and preparing fields of operation, and we use seventy per cent of denatured alcohol as the best method of sterilizing fields of operation, the hands of the surgeon, the assistants and nurses, in attempting to secure an aseptic field. The exposure for ninety seconds of any germs which produce suppuration to a seventy per cent solution of alcohol produces death of all of these germs.

THE ABUSE OF PRESCRIPTION WHISKY

Alcohol is no longer used by scientific physicians in acute inflammatory diseases, such as pneumonia and grippe. It is not only not beneficial but definitely

harmful in such conditions. It is no longer used in septic conditions. Its only use, outside of its external use, in modern scientific medicine is found in cases of individuals who are chronic users of alcohol and who are brought to the hospital suffering from some accident or some disease in which a moderate amount of alcohol is continued for a time in order to prevent the development of delirium tremens.

It, of course, has been a matter of common knowledge that the prescribing of whisky by physicians since the passage of the prohibition amendment has been grossly abused. I think very few of us realize how gross this abuse really has been and what a disgraceful situation has been brought about by the provisions of the prohibition amendment for the prescribing of whisky. I have taken pains to investigate this matter with a good deal of care, and desire to submit to you some of the important results of that investigation. The figures which I shall present to you are accurate in the sense that they give a correct picture of the situation in gross figures.

Year before last there was issued from the government warehouses a total of 1,800,000 gallons of hard liquor. This was almost entirely whisky. Approximately ninety per cent of this was issued on physicians' prescriptions. This would make 1,620,000 gallons—there are eight pints in a gallon—making approximately 13,000,000 pints. At \$3.00 a pint, which is the ordinary price obtained by physicians for these prescriptions, the total amount of money received by the medical profession (all of these prescriptions paid for at that rate) would be about \$39,000,000. I desire to emphasize this point

showing the enormous possibility of graft involved in this situation.

GRAFT IN PRESCRIPTION WHISKY

I desire to submit two main facts:

First—That there is an enormous amount of graft, probably in the neighborhood of \$40,000,000 in the writing of prescriptions by the medical profession for whisky.

The second point I desire to make is that in the modern scientific practice of medicine there are very few cases in which whisky can be properly and scientifically employed as a medical agent.

My experience in the practice of medicine in Chicago covers the period from 1894 to date. I have never had any fixed opposition to the use of whisky in medical practice, but I have never employed it, or seen it properly employed, except in just such cases that I have cited. My very considerable experience in the practice of medicine can not have been so very different from those of other men in the medical profession.

DISHONEST PRESCRIPTIONS

Before the days of prohibition no honest doctor ever prescribed 100 pints of whisky to his patients in a few months; as certainly today no honest doctor ever prescribes 100 pints of whisky every three months, or to make it more emphatic, no honest physician ever prescribed 400 pints of whisky to his patients a year. The Prohibition Administrator in this district informs me that approximately 90 per cent of the physicians who have been issued prescription books regularly prescribe their full allotment of 100 prescriptions every three months. Almost all of these prescriptions are bootlegging prescrip-

tions. Very few of them are bona fide scientific medical prescriptions.

DISGRACE TO MEDICAL PROFESSION

There can be but one meaning to this situation. The man on the street knows what that meaning is; the public, generally, know what this situation means. It can mean but one thing, that the men who are prescribing and selling 100 prescriptions every three months, their full allotment, are a disgrace to the medical profession.

It is obvious that the existing state of facts carries with it an enormous abuse of this whisky prescribing. It is clearly the duty of the organized medical profession of this country to do everything in their power to secure such change in the government regulations as will make it impossible for the bootlegging members of the profession to continue their present practices.

In regard to the habitual use of alcohol by healthy persons all authorities agree that it is a luxury, that it is unnecessary for the growth and maintenance of the body and that it neither promotes greater healthfulness, nor in any way retards the onset of disease.

BAD EFFECTS OF ABUSE OF ALCOHOL

The bad effects of the abuse of alcohol can be seen in hospitals, prisons and asylums of all countries, especially those where the population is addicted to spirits. A large percentage of crime is admittedly done under the influence of alcohol. Alcohol is responsible for a large part of the poverty and misery of the lower classes of the population. Many of the admissions to lunatic asylums are

due to alcohol. It would not be an exaggeration to say that drink has done more injury to mankind than has been done by such great plagues as cancer and tuberculosis combined. It is responsible for a large portion of the venereal diseases that occur. The facts which I have presented above are not merely my impressions, they are taken from the textbooks of the best authorities on pharmacology, the science of the action of drugs.

NEED FOR PROHIBITION

In view of these scientific facts if a nation could by legislation eliminate the curse of drink, with its resulting misery and death, legislation to that effect should be passed over night and rigidly enforced. Fortunately, in this country such legislation has been passed. It has been fairly well enforced; not as effectively as it can be enforced in the future, but it has been sufficiently well enforced to have made a wonderful improvement in the health and well-being of our people as a whole. In some states it has been much more effectively enforced than in others.

REDUCTION IN BEER CONSUMPTION

There has been a great diminution in the amount of alcohol consumed by the people of this country since the passage of prohibition. The consumption of beer has been almost entirely eliminated. Accurate statistics properly accumulated would show probably that less than five or possibly less than three per cent of the amount of beer is consumed in the United States that was consumed in the old pre-war days. The total amount of alcohol consumed in drink is probably less than ten per cent of the amount that was consumed in the pre-war days.

The childish chatter of many individuals who are opposed to prohibition that there is more liquor in the country today than ever before can easily be shown to be untrue. The arguments of those who are opposed to prohibition that everybody is drinking and that everybody is making beer and moonshine can easily be controverted by a careful analysis of the facts. The opposition to prohibition has become with some men a fixed idea, an obsession which makes it impossible for them to treat the problem fairly or intelligently.

SURVEY NEEDED

One of the most important things that can be done at this time would be a survey, by the Federal government, of the actual state of facts in regard to prohibition throughout the country made by a properly qualified governmental body with ample facilities to do the work effectively, as is done by the government in estimating the amount of the wheat crop or cotton crop of the country. The facts in regard to prohibition could probably be quite as accurately estimated as the amount of wheat or cotton raised, and for years such government estimates have been in close keeping with the actual amounts produced.

A GREAT SUCCESS

Taking into consideration the fact that drink has been an almost universal and centuries-old habit of the human race, the results secured by prohibition in this country in the last nine years must be accepted as a great success for this movement.

In wiping out a great curse like drink or like slavery it is to be expected that such an effort would meet with serious

opposition and that success can only be secured after years of effort. This was true of slavery and it will be true of drink.

Fortunately for the United States the Eighteenth Amendment is now a part of our Constitution. It can not be repealed except by the con-joint action of at least 36 states. No legislation by Congress can so modify the definition of intoxicating liquors as to permit the manufacture, sale and transportation of liquors that are in fact intoxicating.

The question as to whether a liquor is intoxicating or not is not a matter of scientific medical opinion at all but is a matter of common knowledge and common sense. It is a matter of common knowledge that a man could get drunk on the old beer that was manufactured before prohibition which contained from 3 to 4 per cent of alcohol, and it is a matter of common sense that if a man can get drunk on such beer he can get drunk on beer containing 2.75 per cent of alcohol by drinking a few more glasses or a few more bottles.

MUST BE CONTINUED

We are, therefore, in a position where our experiment with prohibition must be continued for a number of years. The experiment should be continued in a logical, orderly, scientific way. The Eighteenth Amendment should be thoroughly enforced in all parts of the country by the Federal, state and municipal governments. If this is done the Eighteenth Amendment will accomplish more for the personal hygiene and public health of the people of this country than any legislation ever passed.

One of the most important steps that can be taken in this experiment at this

time, when there is a great deal of controversy over the success or failure of the Eighteenth Amendment, would be the appointment of the Federal body which I have already referred to, a body appointed for the purpose of obtaining definite and positive knowledge as to the existing state of facts in regard to the amount of liquor consumed in this country as compared with the pre-war days. This will, I believe, show that prohibition is even today at least 90 per cent successful in the sense that it has eliminated 90 per cent of the alcohol which was formerly consumed per capita. It is to be hoped that Mr. Hoover, who was so overwhelmingly endorsed at the recent election, running on a dry platform, will undertake this complete survey in order that the country may know the true facts of the situation.

The Eighteenth Amendment is a part of our Constitution and should be made as effective as possible. In the long run, prohibition is bound to win because every man knows and every woman knows that they are better off and that the boys and girls of this country are better off without drink.

(PRINTED IN THE U. S. A.)

